

In the Claims:

Please cancel claims 18 and 23-25. Please amend claims 19-22, 26-31, and 35-37.

Please add new claims 38-42. The claims are as follows:

1-17. (Canceled)

18. (Canceled)

19. (Currently amended) The ~~apparatus~~ electrical structure of claim ~~18~~ 26, wherein the apparatus electrical structure further comprises a chromium oxide layer on the chromium volume.

20. (Currently amended) The ~~apparatus~~ electrical structure of claim ~~18~~ 26, wherein the acid solution includes hydrochloric acid in a liquid bath form.

21. (Currently amended) The ~~apparatus~~ electrical structure of claim ~~18~~ 26, wherein the acid solution includes hydrochloric acid in a spray form.

22. (Currently amended) The ~~apparatus~~ electrical structure of claim ~~18~~ 26, wherein said iron-comprising body includes steel.

23-25. (Canceled)

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2

26. (Currently amended) An electrical structure, comprising:

a chromium volume, ~~wherein said chromium volume is operationally positioned in a conveyorized processing apparatus, said apparatus further including a spray applicator for dispensing an acid solution wherein the chromium volume includes a layer of chromium;~~

an iron-comprising body; ~~in continuous electrical contact with the chromium volume; and~~
said an acid solution ~~in continuous contact with both the chromium volume and the iron-comprising body; wherein the chromium volume is being etched at an etch rate by said acid solution; and~~

13
a layer of conductive metal, ~~wherein the chromium volume includes a layer of chromium; wherein the layer of conductive metal is on the layer of chromium, wherein the conductive metal includes an opening extending through its thickness, wherein the opening exposes the layer of chromium; wherein a portion of the iron-comprising body is within the opening, wherein the portion of the iron-comprising body is in continuous electrical contact with the chromium volume, and wherein a portion of the acid solution is within the opening, and wherein the portion of the acid solution is in contact with both the portion of the iron-comprising body and the chromium volume within the opening.~~

27. (Currently amended) The electrical structure of claim 26, ~~wherein the iron-comprising body includes steel, wherein the acid solution includes hydrochloric acid, and wherein the layer of conductive metal includes a metal selected from the group consisting of copper, aluminum, nickel, silver, and gold.~~

28. (Currently amended) The apparatus electrical structure of claim 18 26, wherein the iron-comprising body includes steel, and wherein the chromium volume includes the metallic chromium₁[[,]] wherein the acid solution includes hydrochloric acid, wherein a temperature (T) and a molarity (M) of the hydrochloric acid is within a triangular space defined by (T,M) points of (21 °C, 2.4 M), (52 °C, 2.4 M), and (52 °C, 1.2 M), and wherein the etch rate is at least a factor of about 2 greater than an etch rate that would occur in an absence of the iron-comprising body.

29. (Currently amended) The apparatus electrical structure of claim 18 26, wherein the iron-comprising body includes steel; wherein the chromium volume includes the metallic chromium, wherein the acid solution includes hydrochloric acid, and wherein a temperature (T) and a molarity (M) of the hydrochloric acid is within a triangular space defined by (T,M) points of (21 °C, 2.4 M), (52 °C, 2.4 M), and (52 °C, 1.2 M), and wherein the etch rate is at least about 5 Å/second.

30. (Currently amended) The apparatus electrical structure of claim 18 26, further comprising a fluoropolymer fluoropolymer dielectric volume bonded to said chromium volume.

31. (Currently amended) An electrical structure, comprising:

a chromium volume;

an iron-comprising body in continuous electrical contact with the chromium volume[[,]]

wherein the iron-comprising body includes steel; and

an acid solution in continuous contact with both the chromium volume and the iron-comprising body, ~~wherein the chromium volume is being etched at an etch rate; wherein the acid solution is adapted to etch metallic chromium at a first etch rate in an absence of any present or prior contact between the metallic chromium and a body that includes iron.~~

32. (Previously presented) The electrical structure of claim 31, wherein the electrical structure further comprises a chromium oxide layer on the chromium volume.

33. (Previously presented) The electrical structure of claim 31, further comprising a layer of conductive metal, wherein the chromium volume includes a layer of chromium, and wherein the layer of chromium is on the layer of conductive metal.

34. (Previously presented) The electrical structure of claim 33, wherein the acid solution is not in contact with the layer of conductive metal.

35. (Currently amended) The electrical structure of claim 34, ~~wherein the acid solution includes hydrochloric acid; and~~ wherein the layer of conductive metal includes a metal selected from the group consisting of copper, aluminum, nickel, silver, and gold.

36. (Currently amended) The electrical structure of claim 31, wherein the chromium volume includes the metallic chromium, wherein the acid solution includes hydrochloric acid, wherein a temperature (T) and a molarity (M) of the hydrochloric acid is within a triangular space defined

by (T,M) points of (21 °C, 2.4 M), (52 °C, 2.4 M), and (52 °C, 1.2 M), and wherein the etch rate is at least about 5 Å/second.

37. (Currently amended) The electrical structure of claim 31, further comprising a fluoropolymer fluoropolymer dielectric volume bonded to said chromium volume.

38. (New) The electrical structure of claim 31, wherein the acid solution is adapted to etch the chromium volume at a second etch rate that exceeds the first etch rate.

39. (New) The electrical structure of claim 26, wherein the acid solution is adapted to etch metallic chromium at a first etch rate in an absence of any present or prior contact between the metallic chromium and a body that includes iron.

40. (New) The electrical structure of claim 39, wherein the acid solution is adapted to etch the chromium volume at a second etch rate that exceeds the first etch rate.

41. (New) An electrical structure, comprising:

a chromium volume;

an iron-comprising body in electrical contact with the chromium volume;

an acid solution in contact with both the chromium volume and the iron-comprising body;

and

a layer of conductive metal, wherein the chromium volume includes a layer of chromium,

and wherein the layer of chromium is on the layer of conductive metal and in direct mechanical contact with the layer of conductive metal.

42. (New) The electrical structure of claim 41, wherein the acid solution is not in contact with the layer of conductive metal.